

### REMARKS

Applicant appreciates the detailed examination evidenced by the Office Action mailed July 25, 2007 ("Office Action"), including the withdrawal of the prior rejections of Claims 20, 21, 30-32 and 34-42. Applicant has amended Claim 31 to correct a minor typographical error. Applicant respectfully traverses the new rejections of Claims 20, 21, 30-32 and 34-42 for at least the reasons presented below.

#### **Independent Claims 20, 32, 36 and 39 are patentable**

In rejecting independent Claim 20 as allegedly unpatentable over U.S. Patent No. 5,561,842 to Ritter et al. ("Ritter") and U.S. Patent No. 4,479,226 to Prabhu et al. ("Prabhu"), the Office Action concedes that Ritter does not teach "allocating cellular radiotelephone frequencies among said plurality of base stations according to a first frequency allocation system for a first one of said spreading codes and according to a second frequency allocation system different from said first frequency allocation system for a second one of said spreading codes," but asserts that Prabhu provides such teachings at column 7, lines 6-9. Office Action, p. 2. Respectfully, this is incorrect.

Prabhu states:

As the mobile in cell A leaves this cell and enters one of the adjacent cells, for example, a cell which employs frequency band B<sub>3</sub>, the mobile ceases to communicate via the base station in cell A and begins to communicate via the base station in its new cell. The mobile may or may not maintain the same carrier frequency sequence--either alternative is possible in accordance with the present invention. That is, in a set of seven contiguous cells employing different frequency bands, the mobile may retain the same carrier frequency sequence and merely change the spectral location that the sequence is used in as the mobile travels from cell to cell. Alternatively, each base station may transmit a different carrier frequency sequence assignment code to the mobile as it enters its cell. In either case, information must be "handed-off" between the base stations in cell A and the new cell the mobile enters.

Prabhu, column 6, line 63, through column 7, line 11. This passage indicates that, when a mobile terminal moves to a new cell, it may continue to use its existing frequency hopping sequence while shifting the sequence in frequency or, alternatively, a mobile may be assigned a new frequency hopping sequence. There is nothing in this description or elsewhere in Prabhu that teaches *allocating frequencies among cells differently for different spreading*

*codes*. Thus, contrary to the assertions of the Office Action, Prabhu does not teach or suggest "allocating cellular radiotelephone frequencies among said plurality of base stations according to a first frequency allocation system for a first one of said spreading codes and according to a second frequency allocation system different from said first frequency allocation system for a second one of said spreading codes," as recited in independent Claim 20. As Ritter also lacks such teachings, the cited combination of Ritter and Prabhu does not teach or suggest the recitations of independent Claim 20. For at least these reasons, Applicant submits that independent Claim 20 is patentable.

Applicant submits that independent Claims 32, 36 and 39 are patentable for at least similar reasons. For example, regarding Claim 32, the Office Action also concedes that Ritter does not disclose "applying a second frequency reuse pattern for the second spreading code," but alleges that Prabhu provides such teachings at column 6, lines 27-30, column 7, lines 2-3 and column 7 lines 7-9. Office Action, pp. 3 and 4. The cited material from column 6 states:

If, in the example shown in FIG. 5, more than seven cells of a predetermined size are required to accommodate the user area demand, some frequency bands must be reused.

This passage merely indicates that if more than seven cells are needed to cover a service area, then frequencies are reused, which is simply a description of a 7-cell reuse pattern. There is nothing here that constitutes a teaching of using *different frequency reuse patterns for different spreading codes*. As discussed above, the cited material from column 7 does not disclose or suggest using different frequency allocations for different spreading codes and, therefore, does not disclose or suggest the use of different frequency reuse patterns for different spreading codes. Accordingly, the cited combination of Ritter and Prabhu also does not disclose or suggest "applying a first frequency reuse pattern for the first spreading code; and applying a second frequency reuse pattern for the second spreading code" as recited in independent Claim 32. For at least these reasons, Applicant submits that independent Claim 32 is patentable.

### **The dependent claims are patentable**

Applicant submits that Claims 20, 30, 31, 34, 35, 37, 38 and 40-42 are patentable at least by virtue of the patentability of the respective ones of independent Claims 20, 32, 36 and 39 from which they depend. Applicant further submits that several of the dependent claims are separately patentable.

Claim 31, which stands rejected as allegedly obvious with respect to Ritter and Prabhu (Office Action, p. 3), recites "wherein the first frequency allocation system comprises a first frequency reuse pattern, and wherein the second frequency allocation system comprises a second frequency reuse pattern." For reasons similar to those discussed above with reference to Claim 32, Applicant submits that such recitations are neither disclosed nor suggested by the cited combination of Ritter and Prabhu. For at least these reasons, Applicant submits that Claim 31 is separately patentable. At least similar reasons support the separate patentability of Claim 40.

Claim 34, which also stands rejected as allegedly obvious with respect to Ritter and Prabhu (Office Action, p. 4), recites:

. . . wherein the step of allocating comprises:  
    adaptively allocating frequencies for use with the first spreading code  
according to a first adaptive allocation scheme; and  
    adaptively allocating frequencies for use with the second spreading code  
according to a second adaptive allocation scheme.

The Office Action alleges that such recitations are taught by Prabhu at column 6, lines 27-30. Office Action, p. 4. As discussed above, this passage is devoid of any teaching of providing different allocations, either fixed or adaptive, for different spreading codes. Accordingly, the cited combination of Ritter and Prabhu does not disclose or suggest the recitations of Claim 34 and, for at least these reasons, Applicant submits that Claim 34 is separately patentable.

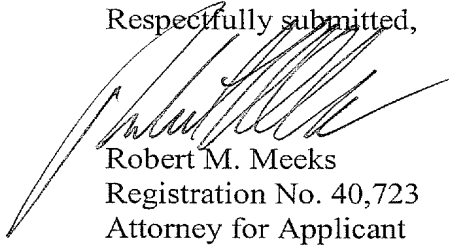
### **Conclusion**

Applicant submits that the present application is in condition for allowance and the same is earnestly solicited. The Examiner is encouraged to telephone the undersigned at 919-854-1400 for resolution of any outstanding issues.

In re: Paul W. Dent  
Serial No.: 09/764,712  
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Respectfully submitted,

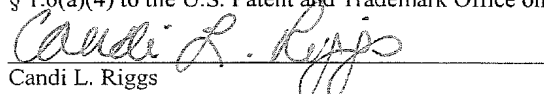


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I hereby certify that this correspondence is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4) to the U.S. Patent and Trademark Office on October 12, 2007.

  
Candi L. Riggs